# Job Title: ENGINEERING TECH IV - SENIOR FABRICATION INSPECTION TECHNICIAN - IPR#46622

**Agency**: Department of Transportation

Closing Date/Time: 05/30/2023 Salary: \$4,790 - \$8,775 MONTHLY Job Type: Salaried Full Time

County: Sangamon
Number of Vacancies: 1

Plan/BU: NR916 - Protech Teamsters

This position is a union position; therefore, provisions of the relevant collective bargaining agreement/labor contract apply to the filling of this position.

All applicants who want to be considered for this position <u>MUST</u> apply electronically through the illinois.jobs2web.com website. State of Illinois employees should click the link near the top left to apply through the SuccessFactors employee career portal.

Applications submitted via email or any paper manner (mail, fax, hand delivery) will not be considered.

## **Agency Mission Statement**

The Illinois Department of Transportation is seeking to hire an Senior Fabrication Inspection Technician.

The IDOT team works diligently to provide safe, cost-effective transportation for Illinois in ways that enhance quality of life, promote economic prosperity and protect our environment. We are problem solvers and leaders, constantly searching for innovations and improvements in support of our commitment to providing the best multimodal transportation system for Illinois.

Our team fosters a culture of inclusivity. We value diversity and hold ourselves to the highest ethical standards as we work together for a common purpose. Team members frequently collaborate with colleagues and others outside the department to best meet customer needs.

The department offers extensive training and career advancement opportunities. Employees also receive a robust benefit package including:

- · Monday-Friday work schedule
- Flexible work schedules are available in many program areas.
- · Health, Life, Vision, and Dental Insurance
- Pension Plan
- (10) Weeks paid Maternity/Paternity Leave
- Deferred Compensation Program and other pre-tax benefit programs (Medical/Daycare)
- Employees earn (12) paid Sick Days annually.
- New Employees earn (10) paid Vacation Days their first year of service and can earn up to (25) paid Vacation Days annually.
- Employees earn (3) paid Personal Days annually.
- (13-14) paid holidays annually (based on start date)
- Tuition Reimbursement

We invite qualified applicants to apply to become part of our team. We are confident that you will take pride in serving Illinois and its residents and visitors.

### Job Responsibilities

This position is accountable for performing quality assurance inspections during the fabrication of structural metals utilized in the construction of complex bridge and traffic structures and related highway appurtenances.

Structural steel inspections: 3,500 tons annually Overhead sign structures inspections: 2,000 lin. ft. annually

This position reports to the Fabrication Inspection Group Technician. There are no subordinates reporting to this position.

The incumbent works in an environment where quality assurance inspections are conducted during the fabrication of structural metals for complex bridges and sophisticated traffic structures. This position ensures that materials, dimensional tolerances, fabrication procedures, protective coating applications, and nondestructive testing conform to approved fabrication drawings and contract specifications while minimizing the possibility of material defects that could reduce the capacity of the structure which would jeopardize public safety or reduce the functional life of the structure.

The most significant challenge to this position is to ensure that fabricators' quality control personnel perform their duties so that fabricated items satisfy contract requirements. This entails maintaining a thorough knowledge of structural metals, fabrication techniques, and typical non-destructive testing procedures to reduce the possibility of deficient assemblies being accepted and incorporated in permanent structures.

# (Job Responsibilities continued)

The incumbent maintains a thorough knowledge of the evaluation and preparation of steel and aluminum materials, the qualification of welding personnel and procedures, the utilization of welding techniques, the nondestructive testing methods commonly used for structural steel and aluminum, and the preparation and application of structural steel protective coatings. The incumbent inspects the fabrication of structural steel and aluminum utilized in bridges and other highway structures. This includes the fabrication of complex structures such as major river crossings, railroad structures, and moveable bridges. Inspection ensures that fabrication conforms to departmental specifications and procedures and may encompass trusses, curved steel girders, and unusual materials. The incumbent evaluates the use of thermal cutting, shearing, carbon arc gouging, heat curving, shop painting, and welding processes that include shielded metal arc, submerged arc, and gas-shielded solid or flux cored wire. The incumbent monitors non-destructive testing of weldments by radiographic (RT), ultrasonic (UT), magnetic particle (MT), or dye penetrant (PT) methods. For RT, the incumbent witnesses the setup, reviews the film, and accepts or rejects the film and the radiographer's report. For UT, the incumbent understands calibration and use of equipment and interprets and documents indications. When MT is utilized, the incumbent verifies proper application and interpretation of results. When deficiencies in fabricated or as received materials are found, the incumbent evaluates the fabricator's proposed repair methods, monitors repairs, and accepts or rejects corrective actions based on contract requirements.

The incumbent functions with minimal guidance and supervision in the field and has full authority to accept or reject materials and workmanship of all fabricated structural components inspected. Unusual circumstances shall be referred to the Fabrication Inspection Group Technician for consultation and/or resolution. The incumbent performs all duties in accordance with departmental policies and procedures.

The incumbent periodically contacts the Bureau of Materials and district personnel. S/He provides the expertise required to resolve any problems which may arise with fabricated material in the field. The incumbent maintains contact with applicable personnel during the performance of his/her duties in fabrication shops throughout the state and country and provides any required supervision and advice to ensure fabrication is in accordance with contract requirements. Extensive statewide and out-of-state travel with overnight stays is required.

The effectiveness of this position is measured by the technical expertise in structural metal's behavior, non-destructive testing, and the preparation and application of coatings displayed by the incumbent. Further effectiveness is measured by the ability to work closely with supervisory and quality control personnel in fabrication shops throughout the country to ensure timely shipment of quality products free from defects.

#### **Principal Accountabilities**

- 1. Ensures that structural metals and members utilized in complex bridges and related highway structures meet departmental specifications and policies.
- 2. Ensures that all structural metals fabrication, testing, and protective coating application procedures are in accordance with departmental specifications and policies.
- 3. Provides technical expertise required for resolving shop fabrication problems.
- 4. Provides expertise, training, and guidance to private contractors, district, and Bureau of Materials personnel as necessary.

- 5. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
- 6. Performs other duties as assigned.

### **Qualifications**

#### **Position Requirements**

- Education/Experience
  - Completion of two years of college in civil engineering technology, pre-engineering or a job related technical/science curriculum PLUS five years of engineering experience; OR
  - Seven years of engineering experience
- · Valid driver's license
- · Extensive statewide and out-of-state travel with overnight stays

#### **Position Desirables**

- Experience in performing a variety of technical tasks related to civil engineering
- American Welding Society (AWS) certification as a Certified Welding Inspector (CWI)

· Strong oral and written communication skills

Work Hours: 8:00 A.M. - 4:30 P.M. Monday - Friday

Work Location: 2300 S Dirksen Pkwy Springfield, IL 62764-0001

Office: Office of Highways Project Implementation/Bureau of Bridges and Structures

Agency Contact: DOT.CONTACTHR@ILLINOIS.GOV

Job Family: Transportation; Science, Technology, Engineering & Mathematics

#### **APPLICATION INSTRUCTIONS**

Use the "Apply" button at the top right or bottom right of this posting to begin the application process.

If you are not already signed in, you will be prompted to do so.

State employees should sign in to the career portal for State of Illinois employees – a link is available at the top left of the Illinois.jobs2web.com homepage in the blue ribbon.

Non-State employees should log in on the using the "View Profile" link in the top right of the Illinois.jobs2web.com homepage in the blue ribbon. If you have never before signed in, you will be prompted to create an account. If you have questions about how to apply, please see the following resources:

State employees: Log in to the career portal for State employees and review the Internal Candidate Application Job Aid

Non-State employees: on Illinois.jobs2web.com – click "Application Procedures" in the footer of every page of the website.

The main form of communication will be through email. Please check your "junk mail", "spam", or "other" folder for communication(s) regarding any submitted application(s). You may receive emails from the following addresses:

- donotreply@SIL-P1.ns2cloud.com
- systems@SIL-P1.ns2cloud.com